

## CLAIMS

We claim:

1. A dynamic voice call admission method for CDMA systems, comprising:
  - for a channel selected from the group of forward and reverse radio channels;
  - calculating a current channel power level for data calls and a current channel power level for voice calls;
  - receiving a request to admit a voice call, wherein a channel power level for voice calls upon admission will exceed a desired total voice power level if the call admission request is granted; and
  - admitting the voice call if the sum of the channel power level for voice calls upon admission and the current channel power level for data calls is less than a power maximum and if, upon admission, a sufficient reserved power is available to admit at least one additional data call.
2. The method of claim 1, further comprising the steps of:
  - providing a power reference based upon a voice call with certain operating characteristics, wherein calls having identical operating characteristics are denoted a voice equivalent;
  - estimating a total current transmitting power of the radio channel; and

estimating, for the radio channel, the total voice equivalent for the data calls and the voice calls,

wherein the calculating of the current channel power levels for the data calls and the voice calls and the channel power level for voice calls upon admission are based upon the total current transmitting power of the radio channel and the total voice equivalents.

3. The method of claim 2, wherein the radio channel is the forward radio channel.

4. The method of claim 3, wherein the calculation of the total voice equivalents for the data calls is based upon only data calls that are currently transmitting bursts in the forward radio channel.

5. A dynamic voice call admission method for CDMA systems, comprising:  
for a channel selected from the group of forward and reverse radio channels:  
calculating a current channel power level for voice calls;  
receiving a request to admit a data call, wherein a reserved channel power level for data calls will exceed a desired reserved channel power if the call admission request is granted; and  
admitting the voice call if the sum of the reserved channel power level for the data calls upon admission and the current channel power level for voice calls is less than a power

maximum and if, upon admission, a sufficient power is available to admit at least one additional voice call.

6. The method of claim 5, further comprising the steps of:

5 providing a power reference based upon a voice call with certain operating characteristics, wherein calls having identical operating characteristics are denoted a voice equivalent;

estimating a total current transmitting power of the radio channel; and

estimating, for the radio channel, the total voice equivalent for the data calls upon admission and the voice calls,

wherein the calculating of the current channel power levels for the voice calls and the reserved channel power level for the data calls upon admission are based upon the total current transmitting power of the radio channel and the total voice equivalents.

7. The method of claim 6, wherein a voice equivalent of the reserved channel power for the data call upon admission is less than the total voice equivalent for the data calls upon admission.

8. The method of claim 7, wherein the channel is the forward radio channel.

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